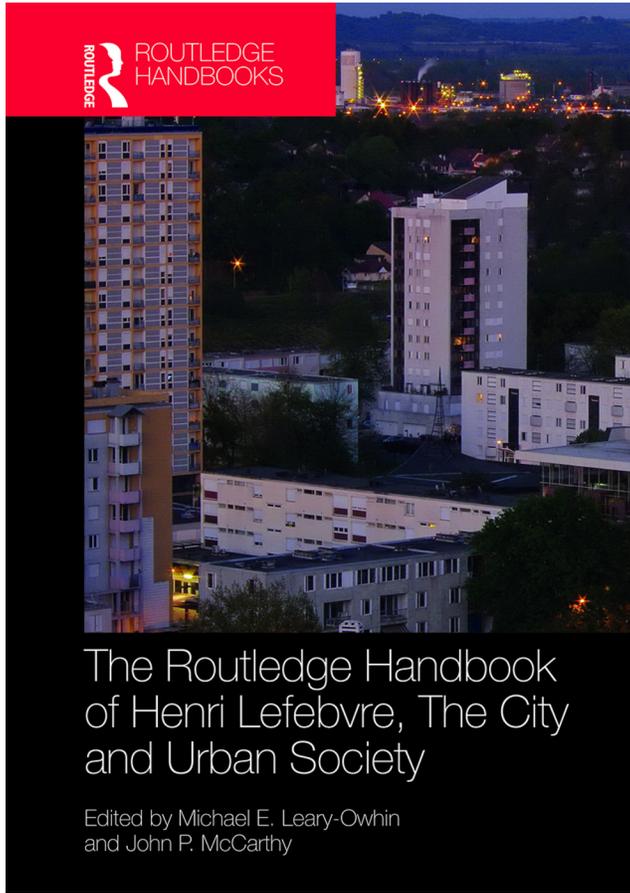


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The Routledge Handbook of Henri Lefebvre, The City and Urban Society

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“Ecologizing Lefebvre: Urban Mobilities & the Production of Nature”

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Summary: In this chapter I use Lefebvre’s production of space ideas to analyze the production of nature and expand Lefebvrian ecological analysis. I apply the concepts of spatial practice, representational spaces, representations of space and Lefebvre’s historical approach to the production of urban space to illuminate the production of nature. More than Lefebvre’s observations on nature, I rely on his forward thinking critique of the car, and put Lefebvre’s ideas in conversation with the new mobilities paradigm and recent research on the globalizing system of car travel. To advance research on the production of nature, and draw on the spirit of Lefebvre’s car critique, I examine how nature is produced by cycling in Canada. My results suggest cycling can reassemble nature in the city outside the parameters of hegemonic automobility and neoliberal capitalism. I propose that automobility, in the form of early twentieth century parkways in North America, can ecologically inspire the expansion of cycling nature in the city. The chapter concludes by suggesting a line of future Lefebvrian ecological analysis about combining the production of nature with differential space.

Introduction

Among global brands selling high end urbanism across the planet, ‘Vancouverism’ stands out for the way it animates nature. According to city officials, ‘Vancouverism is an internationally known term that describes a new kind of city living.’ This new way of living

combines deep respect for nature with enthusiasm for busy, engaging, active streets and dynamic urban life. Vancouverism means tall slim towers for density, widely separated by low-rise buildings, for light, air, and views. It means many parks ... combined with an emphasis on sustainable forms of transit. ... No wonder city planners and urban designers come to Vancouver from around the world to find inspiration. (City of Vancouver 2017)

Taking advantage of the city’s stunning coastal mountain backdrop, Vancouverism attracts people who love the city and love leaving it for the surrounding forests, mountains and beaches (Stoddart 2012). Vancouver’s urban brand is part of a larger production of nature that travels on either side of city limits, and by different modes. While sustainable mobilities grow inside the city, Vancouverites mainly use the car to reach wilderness outside it, and happen to use more luxury vehicles than anywhere else in North America (Azpiri 2016). On any weekend or Friday afternoon, many residents hop in their Mercedes-Benz, BMW, Audi, Lexus, Bentley, Rolls-Royce, Ferrari or Lamborghini and leave the city in style for wild nature. Many other residents drive to nature in more humble vehicles – including a small army of vintage Mitsubishi Delicas, Volkswagen Westfalia Campers and other new age, diesel-powered hippie vans. Overall, this heavy reliance on the car highlights a contradictory production of nature, fragmented between work/recreation, urban/non-urban and banality/splendour. The luxurious automobility, watercraft and real estate (comparable to Hong Kong, Sydney and London) with which elite Vancouverites orchestrate nature, points to broader relations between car capitalism and neoliberal planetary urbanisation. Such production of nature cries out for Lefebvrian analysis.

In this chapter I examine how Lefebvre's ideas elucidate the production of nature, with a focus on nature's enactment in the Canadian urban context. Ecological Lefebvrian analysis is underdeveloped. After all, Lefebvre construed nature as succumbing to abstract spaces of capitalism: 'the fact is natural space will soon be lost to view. Anyone so inclined may look over their shoulder and see it shrinking below the horizon behind us' (1991: 31). Leaving behind this passive idea of nature, and looking ahead at a nature-filled horizon, I examine how Lefebvre's production of space ideas and historical approach to urban space enrich the analysis of the production of nature, wherein nature takes on transformative agency. This agency means nature cannot be reduced to a product or producer of car capitalism. In this chapter I ask, how can nature be produced otherwise?

To cultivate Lefebvrian ecological analysis, I put his production of space ideas in dialogue with the new mobilities paradigm (Sheller & Urry 2006). As Haraway (2016: 35) says, 'it matters what thoughts think thoughts, ... what relations relate relations'. For example, it matters if humans continue to imagine and relate nature with the car and SUV rather than other ways of moving together. Thinking the production of nature with mobilities can invigorate ecological analysis of 21st century conundrums such as the way Canadians orchestrate nature. Lefebvre's dim view of nature relates to his prescient critique of the car and its planetary impact (Scott 2013). In fact, Lefebvre's car critique helped inspire mobilities scholarship, which exploded ten years ago in part because scholars started scrutinizing the self-organizing, coercive, hegemonic and ecologically disastrous 'system of automobility' (Conley & McLaren 2009; Urry 2004; Sheller & Urry 2000). In this chapter I build on Lefebvre's car critique by arguing cycling can produce nature differently.

The chapter has three sections. In the first section I review Lefebvre's car critique and situate new mobilities literature within the production of nature discussion. Drawing on Lefebvre's production of space ideas, I refine three questions for my subsequent analysis:

- How can *spatial practices* that enact nature not simply reproduce existing social relations, but transform them, along with what it means to be human?
- How can urban mobilities cultivate *representational space* alongside more sophisticated *representations of nature* that cultivate associations between humans and nonhumans?
- Whereas automobility sets nature apart from human activity in the abstract space of neoliberal capitalism, how can cycling, following Lefebvre's *historical approach to the production of urban space*, produce nature differently?

To explore these questions, in the second section of the chapter I analyze data from an ethnographic study of urban cycling in major Canadian cities (2013–2016). These data include interviews with city planners and politicians as well as mobile video data collected during ride-alongs and follow up video elicitation interviews. I present results of shadowing people as they bike to nature in Winnipeg, Ottawa and Toronto. I then expand my analysis by applying Lefebvre's historical approach to the production of space to show how automobility, through early twentieth century parkways in North America, can ecologically inspire the expansion of cycling nature. My analysis concludes with a comparison of cycling nature in Canada and Finland. In the third, concluding section I suggest that nature and wilderness stand a greater chance of flourishing if their production by cycling ameliorates rather than exacerbates planetary gentrification.

Automobility and the Production of Nature

Lefebvre's writing on the car, more than his observations on nature, cultivates the production of nature as a site for ecological analysis. For Lefebvre, the car is a critical tool for imposing the conceived and orderly space of engineers and planners upon historical, messy lived space. He decries how complex, knotted cities, like the old Paris

obliterated by Haussmann, were “sliced up, degraded, and eventually destroyed ... by the proliferation of fast roads and of places to park and garage cars.’ Lefebvre laments ‘tree-lined streets, green spaces, and parks and gardens’ that were ‘sacrificed to that abstract space where cars circulate like so many atomic particles’ (1991: 312-359). Some take issue with Lefebvre’s depiction of the car as a purveyor of abstract space and global capitalism. Edensor (2003), for example, complains that Lefebvre contributes to ‘legion’ depictions of car driving as ‘inherently malign.’ He protests Lefebvre’s criticism ‘that the driver moves through an “abstract,” “flattened” space and is concerned only with reaching a destination.’ Edensor (2003: 152) argues that car driving affords sensuous and creative possibilities for ‘reverie,’ kinaesthetic skills and pleasure. But this is unfair, Lefebvre does not deny such possibilities, and it misses Lefebvre’s larger point, that mass car travel engineers the dominant space in a growing number of societies for accelerating capital flows through new car-oriented development as infrastructure for neoliberal urbanism (Scott 2013). Lefebvre was onto something big.

Writing decades ago, Lefebvre shows how the car contributes to rigid nature/city dualisms, setting nature apart from city and society by enveloping it in the abstract space of neoliberal capitalism. This prescient car critique is borne out by research on the hegemonic system of automobility in the new mobilities paradigm (Conley & McLaren 2009; Sheller & Urry 2006; Sheller & Urry 2000). The car is not inherently malign but is caught up in significant ecological degradation, America’s ‘secessionist automobility’ (Henderson 2009) and divergent forms of neoliberal populism, like the pro-car authoritarian populism of Rob Ford’s government in Toronto, 2010-2014 (Walks 2015). What did become legion across the 20th century were inherently benign, freedom-loving depictions of the car by prolific commercial advertising as the only vehicle for nature. As Aronczyk (2005) puts it, ‘without cars, wilderness as we know it could not exist.’ Automobility assembles wilderness, from Iceland to Quebec, as a predefined destination for car travel across many sites of travel practice (Huijbens & K. Benediktsson 2007). New versions of the car, via digital sophistication and construction of ever more intelligent roads and vehicles, produces nature by focusing more attention on car consoles, media and softwares, with wilderness outside the car acting as a backdrop. In

effect, neoliberal car capitalism re-romanticizes and pacifies wilderness, producing nature as something pure, external and exclusive for people rolling in with the right wheels.

The production of nature discussion grew over the last few decades from a predominantly Marxist focus (Smith 2010) towards diverse theoretical perspectives, including science and technology studies (Haraway 2016). One way to characterize this shift entails a move away from strong social constructionism to approaches that recognize the material reality and agency of nature. For example, Fitzsimmons (1989: 106-10) argues that once capitalism and urbanization abstracted nature as society's antithesis, nature gained a 'mystifying power' over urban intellectual life that shrouds the role of capitalist production and the 'material reality' of nature. Elaborating this line of thought, Castree (1995: 13) argues the materiality of nature must include 'both the ontological reality of those entities we term "natural," and the active role those entities play in making history and geography.' Fast forward to more recent discussion, and we see less emphasis on exceptionalizing humans and more comfort with inviting diverse nonhumans into the ranks of nature's producers (Latour 2004; Haraway 2008). As Ingold (2011: 7-9) puts it, there are multiple ways of being alive in the world – 'there are human becomings, animal becomings, plant becomings, and so on.' As Vannini and Vannini (2016: 215) put it, wilderness is a 'meshwork' of tangled lines of growth that 'force us to confront life as becoming, as movement, as something entangled in multiple currents of formation.'

Recent discussions on assembling nature and wilderness refocus attention on the significance of movement (Lund 2013), which Lefebvre emphasized in his car critique and the production of space. Lefebvre imagined social space as moving, among other ways, like the motion of water:

Great movements, vast rhythms, immense waves – these all collide and 'interfere' with one another; lesser movements, on the other hand, interpenetrate. ... any social locus could only be properly understood by taking two kinds of determinations into account: on the one hand, that locus would be mobilized, carried forward, and sometimes smashed apart by major tendencies; ... on the

other hand, it would be penetrated by, and shot through with, the weaker tendencies characteristic of networks and pathways. (1991: 87)

Hegemonic automobility and driving nature comprise a great interference, an immense wave with vast sociotechnical momentum. It begs the question, can other spatial practices of mobility that enact wilderness avoid reproducing existing social relations, like rigid nature/society dualisms, caught up in the car? Will cycling nature get smashed apart by this immense great wave? Where cycling interpenetrates it, will cycling get dragged along with automobility's production of nature, or can it escape the car's undertow sideways and reassemble nature differently? Can cycling cultivate representational spaces of nature alongside sophisticated representations of nature in which humans and nonhumans flourish? Can ecology actually challenge neoliberal capitalism? This last question, about nature's moral worth (Latour 2004; Thévenot et al. 2000), speaks to the high stakes of politically challenging the car and its wilderness.

Producing Nature Differently

Spatial practices of cycling nature carry the potential to contest, if not transform, existing social relations and perceived spaces of urban nature. Whereas automobility tends to produce nature as an unspoiled destination for the car bracketed apart from the ordinary urbanized space in which the majority of humans live, cycling insinuates nature and wilderness into daily spaces of practice. Participants in a multiyear ethnographic study of urban cycling in Canada (2013-2016) demonstrate how cycling, on river trails and multi-use pathways set outside car traffic (yet in the orbit of work and home), brings nature, nonhumans and immersive weather into everyday life. It is already well documented (Larsen 2014; Aldred 2013; Furness 2010; Spinney 2006) that cycling exposes people to the nature of their surroundings. In what follows, drawing on Lefebvre, I show how cycling transforms the production of nature.

Theo in Winnipeg captures a common sentiment about cycling nature in practice. Lamenting the high number of pickup truck drivers in the prairie city who seem dangerously detached from their surroundings, he pivots, ‘but that’s the fun piece in biking in my mind, is that you have to be aware of your environment and how you interact with it, you don’t have a choice.’ Dasha says cycling, even in Winnipeg’s brutal winter, gives her ‘the time to actually enjoy her surroundings.’ She describes how her cycling to work also affords access to city green spaces, where ‘there’s a sense of removal from traffic, and then quiet, or like a different noise. Like by the river, there’s spots where you can kind of get away (see Figure 1), even around other people.’

Insert Figure 1: Dasha cycling along the confluence of the Red River and Assiniboine River in Winnipeg, Manitoba

Theo elaborates how cycling on pathways in the woods by the water, separated from the car, do not separate ‘nature’ and ‘daily life’ into silos or what Lefebvre (1991: 329) calls different ‘space envelopes.’ For Theo, cycling

reminds you that the city has a natural or nature component to it. It’s not all *jungle de béton*. Especially in a city like Winnipeg with so many spaces interacting with the river and natural riverbanks, there’s something fun to allow yourself, especially if it as simple as getting to work, to insert a bit of natural environment in your life, and combine it as part of something utilitarian. (Interview with author)

The integration of work and play, concrete and nature playing out in Winnipeg through cycling nature challenges tidy divisions between functional spaces of practice conceived by automobility, especially human society versus wild nature. Spatial contraventions by cycling show how prolific spaces of practice, like work and nature, become embroidered in the material world.

Cycling transforms nature by pouring its spatial practice into daily life, but also by

prying the production of nature apart from neoliberal capitalism. Lefebvre (1991) criticizes the car, not for creating routine practice per se, but for the way the car's practice 'coerces' people into driving through commodified landscapes (Sheller & Urry 2000), increases 'compulsory consumption' (Soron 2009) and services 'the reproduction of global capital, in a manner that increasingly alienates us from the rhythms and desires of the human body ... and the cycles of the natural world' (Gardiner 2004). Cycling can lubricate the flows of global capital by contributing to gentrification and racialized neoliberal urbanism (Hoffman 2016). But cycling, less coercive and channeled into development than automobility, also opens up spaces of practice beyond market worlds of neoliberal capitalism, like wilderness pathways in the city. Ecological skills, such as noticing and following change in more-than-human environments, flourish in public spaces outside the marketplace. On wilderness pathways, people cycle with enough speed to satisfy daily mobility needs, yet with enough slowness and physical exposure to know, and feel like they are part of, their surroundings. On such paths, Theo and Dasha engage nonhumans, like rivers, birds and plants, as ends rather than commodified instruments. Such slower, closer enactments of nature may only be a small space of practice compared to driving nature with a car. But they render people more vulnerable to becoming human with nonhumans, and challenge anthropocentric notions of what it means to be human.

Representational spaces of cycling nature further contest abstract, human centred notions of nature by folding moments of wonder and possibility into a narrow but growing space of cycling practice. Such cycling moments alter the directly lived space of nature. For Lefebvre, lived spaces, spaces of representation, are alive in the sense of folding time or duration into space. Lived space opens up the production of space to a 'radical outside' (Seigworth 2000: 248) past the familiar productions of the city that slice up space into society/nature, work/play and urban/wilderness. Representational space enters the production of cycling nature during fleeting moments, notably while riding and pausing on wilderness pathways involving water, bridges, play and public art.

Colm in Toronto slips through a representational space that resonates with the experience of other people cycling through Canada's 'cosmopolitan ecology' (Gandy

2013). While riding along a polluted if biodiverse and resilient river valley hidden in the ravines beneath Toronto's cement crust, Colm stumbles upon a man painting a mural on the concrete foundation of a gigantic viaduct arching over top of the valley. Lurid colours and surreal animal figures, floating up the viaduct towards an invisible vibrating stream of cars, clash with the faded grasses and sumac trees around the river banks. The odd scene pulls Colm off his bicycle into conversation with the artist, who explains the mural aims to defamiliarize and celebrate Toronto's natural underworld as part of an international sporting event. What makes the familiar valley suddenly seem strange to Colm, however, is a feeling of awareness of the wider watershed as a whole piece of the city that overflows this space, if only for a moment. The ability to stop and imagine his surroundings with art allows Colm to notice nature differently, with more mindfulness. He contravenes and plays with his boundaries between city and wilderness, but also between the trivial and extraordinary, articulating an 'everyday utopianism' (Gardiner 2004).

While riding to work or just for pleasure, Theo experiences similar flashes of presence triggered by water crossings and public art. He calls them 'moments of zen.' There's one bridge in particular that plays with his temporal, representational sense of space.

"There's one bridge in Winnipeg, the Arlington [b. 1910], that was designed for the Nile, and then something happened, so Winnipeg got it for like, half off kind-of-thing. There's something about that moment, where you cross a bridge in Canada that was designed to cross the Nile. (Interview with author)

Moments of zen or spatial duration emerge for Theo especially where art escapes the spatial control of the gallery and moves into active transportation pathways along natural corridors. Such art ranges from human faces carved in trees that watch and startle passerbys to furnishings in natural amphitheatres at ancient river crossings that point to constellations of stars. Along nature pathways, says Theo,

many bridges now incorporate an art element, and its fantastic to witness and be inspired by that and stop and actually look at the art. So I go, it's not necessarily nature versus non-nature. I don't know what the opposite of nature is... But cars go too fast, so they miss the art. (Interview with author)

Dasha, too, finds zen moments on bridges in the urban wild, dwelling less on the art than the special acoustics and big soundscapes along bridges and shores set apart from cars by water. She plays with this space, taking her feet off the pedals and standing on her bicycle frame while swerving around manhole covers, listening to how nature and the city enable each other. In fact, people cycling nature across urban Canada, from Vancouver to Halifax, report flashes of extensive presence with nonhumans during playful moments on wilderness pathways, wherein the regular risks and rules of the road relax. They may be ephemeral. But representational spaces of cycling nature form an important part of the reason why cyclists search for nature outside in the city to begin with.

Spatial representations of cycling nature provide a powerful tool for expanding small spaces of practice and fleeting moments of zen into a larger, concrete production of urban nature. Mobilizing representations of cycling nature is politically complicated in Canada, where cycling activity across the board remains low. In 2011, the proportion of workers commuting by bicycle ranged from a low of 0.2 percent St. John's, Newfoundland to a high of 5.9 percent in Victoria, British Columbia (Statistics Canada 2013). Whether cycling practice and banal utopianism grow into more-than-human nature outside the car depends on plans, technical models and conceived space. Simple conceived spaces of cycling nature helped cultivated the planning of Winnipeg's Churchill Parkway, on which Theo and Dasha enact nature in the heart of a continent, and Toronto's Don River Valley Trails, on which Colm lets his imagination wander off into an 'urban wasteland' (Gandy 2013) teeming with nonhuman history and rhizomes. These and other wilderness pathways help assemble the new Trans Canada Trail, a 24,000 kilometre route for persons-without-cars linking 15,000 communities.

Representations of cycling nature, like Vancouverism and the Trans Canada Trail,

wield a double edged sword. On one hand, they picture planning and development for nature outside the car. On the other hand, because all representations of space ‘are tied to the relations of production and to the “order” which those relations impose’ (Lefebvre 1991: 33), representations of cycling nature may lead to the production of a nature suspiciously similar to the romantic and anthropocentric nature produced by the car industrial complex. However, there are hopeful signs that some conceived spaces of cycling nature can help swim cycling sideways and escape the strong undertow of automobility into a more embodied, messier nature, which cultivates closer relations with nonhumans.

Representations of cycling nature are not planned and plunked down on some virginal tabula rasa, but in the material reality of the city (usually around its knotty points and bends). This means in urban Canada that cycling nature involves tangoing with automobiles. Francesca in Ottawa, like fellow cyclists Winnipeg and Toronto counterparts, begins the process of cycling nature by leaving her street and negotiating fast moving motorists on a linear arterial road conceived geometrically and instrumentally for car commuting. Before long, Francesca escapes into a fulsome, planned cycling habitat: Ottawa’s Capital Pathways, a 600 kilometre network of multi-use, curvilinear paths linking parks with the rest of the city (Scott 2016). Both city pieces – the car artery and wilderness pathway – co-constitute cycling nature, and the latter is as much a conceived space as the former, meticulously crafted by federal city planners charged with maintaining Canada’s capital as a beautiful Washington of the North.

Lefebvre’s *historical approach to the production of urban space* illuminates how some representations of cycling nature, like Ottawa’s pathways, over time bolster particular, embodied ways of practicing and reimagining nature with cycling (Scott 2016). An historical approach also shows, as much as car driving and cycling diverge with respect to nature’s production, driving nature can guide, if not ecologically inspire, the expansion of cycling nature. For example, Ottawa’s wilderness pathways, Canada’s most prominent, also constitute the nation’s earliest network of such pathways. They were conceived and laid down starting in the 1970s along the capital’s canals and rivers,

in many cases alongside parkways that were designed for the same purpose – connecting people to nature into the city – but with motorists in mind. Ottawa’s parkways enjoy an even longer, illustrative lineage. In 1888, Frederick Law Olmsted established, in the case of Buffalo, what ‘is to be understood by the term parkways. They plainly serve, not simply as branches or outworks of the park with which they connect but as a part of the general street system of the city’ (Olmsted 1971: 147). The parkway’s value for Olmsted derives not from speed, but from the nature surrounding it. Ottawa took this idea to heart, elaborating slow and windy park roads across the city for motor car driving by remarkable vistas without the signage or industrial trucking that would distract drivers from contemplating nature (Scott 2012; Gordon 2015). The moral force of this production of nature is tempered by its romanticization of nature and role in imposing colonial space on unceded Anishinaabe (Algonquin) territory. Notwithstanding these important limitations, the parkway offers ecological inspiration and material direction for the urban expansion of cycling nature.

As cycling nature in Canada’s capital suggests, the production of nature is an international process, which can be further elucidated through international comparison. Canada affords diverse forms of cycling nature across a vast urbanizing landscape, but levels of cycling activity, as in the United States, are generally low. One avenue for developing this analysis entails comparing Canada to another country with a more advanced cycling culture and more extensive experience with cycling nature. While the Netherlands, Germany and Scandinavia all offer fruitful possibilities, I suggest Finland, especially the northern Finnish city of Oulu, provides an analytically important comparison. As a capital of winter cycling in the global North (Babin 2014), Oulu faces many of the same weather related challenges to everyday cycling as Canadian cities, yet meets these challenges with innovative maintenance and effective educational campaigns. Winter, however, is not the most salient basis of comparison.

On the surface, Oulu’s pyörätie or cycle pathways look very similar to multi-use pathways in Ottawa, Vancouver, Winnipeg, Toronto and Halifax. However, a critical difference emerges that helps explain why people cycle at much higher rates in Oulu and

think of cycling nature, if they think of it all, as simply part of everyday life. This difference, according to city officials and a cycling campaign leader I interviewed in summer 2015, lies in the way Oulu's pathways were planned and developed, beginning in the 1970s, as the most efficient way to travel in green spaces between city neighbourhoods and the urban core. Ottawa was lucky, also getting in on the ground floor of pathway planning, such that Capital Pathways grew into efficient routes that combine nature with daily mobility needs. Most cities in Canada, however, like the United States, are now left scrambling to assemble wilderness pathways after decades of already implementing expensive car-based infrastructure, which, as Europe shows, is very difficult, politically and physically, to unbuild (Hommels 2008). As part of a larger, historical production of urban nature, the pyörätie offers a compelling opportunity for international policy transfer, with Ottawa already demonstrating a version in Canada.

Conclusion

In this chapter I demonstrated how Lefebvre's broader production of space ideas, more than his observations on nature, offer an effective conceptual toolkit for expanding the production of nature as a site of Lefebvrian ecological analysis. In particular, I showed how spatial practices, representational space, representations of space and Lefebvre's historical approach to the production of urban space can be applied in combination to illuminate the production of nature, using cycling across urban Canada as a case study. To advance production of nature research, I placed Lefebvrian thought in dialogue with the new mobilities paradigm, noting how this paradigm draws inspiration from Lefebvre's prescient car critique. In the spirit of Lefebvre's biting critique of the car and its production of space, I examined how nature can be produced outside the parameters of hegemonic automobility and neoliberal car capitalism. I showed how cycling nature, more than driving it with a car, produces nature as an embodied, exposed and ecologically valuable process of cultivating closer relations with nonhumans. I conclude, cycling carries significant potential to reassemble how humans value and engage with more-than-human nature.

Limitations of my analysis, including its focus on the Global North and my lack of attention on social cycling inequities, point to ways of advancing research on the production of nature. There lingers the fundamental, ethically complex question, who gets to cycle with nature? The preponderance of high quality cycling facilities in Northern Europe and select, English-speaking western cities like Ottawa, Portland, San Francisco and Melbourne, speaks to two pressing needs: transferring while adapting cycling nature knowledge to non-western nations, and cultivating dynamic cycling cultures like Singapore, Kyoto and Beijing, to name but a few non-western examples. This policy transfer is made all the more significant in light of megacities in the Global South expanding through automobility. An equally important question of social access to nature pertains to cycling within the city, as Vancouverism shows, with its noble principles and advanced gentrification. An important avenue for future ecological analysis entails examining how cities can produce nature as neither abstract nor absolute space, but as differential space with political possibilities for expanding rights to urban nature, including the rights of great apes and other nonhuman beings. Ultimately, the ecological value of cycling may depend on contesting automobility and planetary gentrification. In sum, to catch up with nature and ecologize Lefebvre, humans need to slow down like water and cycle with nature.

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